

**PATENT COOPERATION TREATY**

REC'D 18 MAY 2005

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From the:  
INTERNATIONAL SEARCHING AUTHORITY

To:

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**PCT**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)	11 MAY 2005
Applicant's or agent's file reference AJM:PDM:FP21228		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/AU2005/000257	International filing date (day/month/year) 28 February 2005	Priority date (day/month/year) 27 February 2004	
International Patent Classification (IPC) or both national classification and IPC Int. Cl. 7 A61B 1/00, G02B 23/26			
Applicant OPTISCAN PTY LTD et al			

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer <b>JULIA HU</b> Telephone No. (02) 6283 2754
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2005/000257

**Box No. I Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
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Box No. V      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims 1-29	YES
	Claims	NO
Inventive step (IS)	Claims 1-29	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-29	YES
	Claims	NO

2. Citations and explanations:

NOVELTY (N) AND INVENTIVE STEP (IS) claims 1-29

The invention of the claims is an endoscope or microscope that adopts a reflective optical element to achieve both focussing and side-viewing functions. This simple reflective optics design is novel and inventive over conventional refractive configurations.

All of the documents cited in the International Search Report were category A only. The closest prior art of US 5163935 contains a mirror lens 42 which has a reflective mirror surface 46 (see Fig. 2). However, this surface does not have an optical figure to focus light and merely serves to redirect the refracted light (by surface 44) through the side window (48) toward treated tissue (52). The prior art endoscope design still represents conventional refractive configuration with no internal focussing reflective elements/surfaces.

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- a) Claim 25 is not clear because there is no antecedent to *the tissue* (line 4) and no antecedent to *the interior of the block* (lines 5-6).
- b) The specification is not clear in defining an *optical block* 20 both in the description and as illustrated in Figures 1 and 3 (at least). The description at page 10 lines 9-10, for example, describes a generally cylindrical plastic optical block 20, which appears to refer to a solid piece of material as the term block suggests. However, from reading the specification as a whole, it appears that this optical element 20 (made of glass or polymer, as per page 10 line 12) should take the form of a hollow cylinder so that light can travel freely (that is, no refraction/reflection occurs inside the element) until it hits the end wall 26 to be focused by this reflective surface. The hollow form of the optical element is further confirmed by the description at page 10 lines 19-25, where it describes that the *optical block* 20 *may be filled with a liquid* .... Therefore, the term *optical block* as currently used in the description appears to be misleading.